WHAT IS CLAIMED IS:

1. A projection-type display apparatus comprising:

a light source that emits a light beam;

a modulator having an image forming area, the modulator receives the light beam emitted by the light source and outputs a modulated light beam;

a projection lens that projects the light beam modulated by the modulator;

an optical element, disposed in an optical path between the light source and the modulator, the optical element splits the light beam into a plurality of intermediate light beams; and

a superimposor capable of being adjusted to different mounting positions that superimposes each of the intermediate light beams onto the image forming area of the modulator.

2. The projection-type display apparatus of claim 1, further comprising a reflector capable of being adjusted to different mounting angles with respect to an incident optical axis and being provided in the optical path between the light source and the modulator.

3. The projection-type display apparatus of claim 1, further comprising:

a color separating optical system provided between the superimposor and the modulator to separate light output from the superimposor into color light beams;

a plurality of modulators connected with the color separating optical system to produce modulated color light beams;

a color synthesizing optical system that receives the modulated color light beams and outputs enlarged synthesized color light beams which are projected by the projection lens; and

a reflector disposed in an optical path between the color separating optical system and at least one of the plurality of modulators and having an adjustable mounting angle with respect to an incident optical axis.

4. The projection-type display apparatus of claim 3, wherein a mounting angle of the reflector located closest to the modulator is adjustable.

5. The projection-type display apparatus of claim 3, wherein the modulator is a reflection type modulator.

6. A projection-type display apparatus comprising:

a light source that outputs a light beam;

a first optical element that splits the light beam output from the light source into a plurality of intermediate light beams;

a second optical element including a polarization conversion unit that outputs polarized light beams and a superimposor that superimposes light beams output from the polarization conversion unit, the superimposor having an adjustable mounting position, the second optical element arranged in a vicinity of a position where the intermediate light beams are converged, the second optical element separates the intermediate light beams from the first optical element into a p-polarized light beam and an s-polarized light beam, the second optical element aligns a polarization direction of one of the p-polarized light beam and the s-polarized light beam with a polarization direction of the other of the p-polarized light beam and the s-polarized light beam, and the second optical element outputs the resulting light beams;

a modulator that receives and modulates the light beams emitted from the second optical element; and

a projection lens that projects the light beam modulated by the modulator.

7. The projection-type display apparatus of claim 6, further comprising a reflector provided in an optical path between the light source and the modulator, the reflector having an adjustable mounting angle with respect to an incident optical axis.

8. The projection-type display apparatus of claim 6, further comprising:

a color separating optical system provided between the superimposor and the modulator to separate light output from the superimposor into color light beams;

a plurality of modulators connected with the color separating optical system to produce modulated light beams;

a color synthesizing optical system that receives the modulated color light beams and outputs enlarged synthesized color light beams which are projected by the projection lens; and

a reflector disposed in an optical path between the color separating optical system and at least one of the plurality of modulators and having adjustable mounting angle with respect to an incident optical axis.

9. The projection-type display apparatus of claim 8, wherein a mounting angle of the reflector located closest to the modulator is adjustable.

10. The projection-type display apparatus of claim 8, wherein the modulator is a reflection type modulator.

11. A projection-type display apparatus comprising:

a light source that emits a light beam;

a modulator having an image forming area, the modulator modulates the light beam emitted by the light source;

a projection lens that projects the light beam modulated by the modulator and a projector screen;

an optical element, located in an optical path between the light source and the modulator, the optical element splits the light beam emitted from the light source into a plurality of intermediate light beams;

a superimposor that superimposes each of the intermediate light beams from the optical element onto the image forming area of the modulator; and

an adjustment mechanism connected with the superimposor to adjust a mounting position of the superimposor.

12. The projection-type display apparatus of claim 11, further comprising:

a first adjustment mechanism connected with the superimposor to adjust the mounting position of the superimposor in a first direction orthogonal to an optical axis; and

a second adjustment mechanism connected with the superimposor to adjust the mounting position of the superimposor in a second direction orthogonal to the optical axis and the first direction.

13. The projection-type display apparatus of claim 12, wherein the adjustment mechanism comprises:

a base adjustment plate;

a first adjustment plate slidably movable in the first direction relative to the base adjustment plate; and

a second adjustment plate slidably movable in the second direction relative to the first adjustment plate.

14. The projection-type display apparatus of claim 13, wherein the adjustment mechanism comprises a first slip prevention mechanism that prevents the first adjusting plate from slipping in the second direction and a second slip prevention mechanism that prevents the second adjustment plate from slipping in the first direction.

15. The projection-type display apparatus of claim 13, wherein the superimposor is fixed to the second adjustment plate.

16. A projection-type display apparatus comprising:

a light source that outputs a light beam;

a first optical element that splits a light beam output from the light source into a plurality of intermediate light beams;

a second optical element including a polarization conversion unit that outputs polarized light beams and a superimposor that superimposes light beams output from the polarization conversion unit, the second optical element arranged in a vicinity of a position where the intermediate light beams are converged, the second optical element separates the intermediate light beams from the first optical element into a p-polarized light beam and an s-polarized light beam, the second optical element aligns a polarization direction of one of a p-polarized light beam and the s-polarized light beam with a polarization direction of the other of the p-polarized light beam and the s-polarized light beam, and the second optical element outputs the resulting light beams;

a modulator that receives and modulates the light beams emitted from the second optical element;

a projection lens that projects the light beam modulated by the modulator; and

an adjusting mechanism that adjusts a mounting position of the superimposor.

17. The projection-type display apparatus of claim 16, further comprising:

a first adjustment mechanism that adjusts the mounting position of the superimposor in a first direction orthogonal to an optical axis; and

a second adjustment mechanism that adjusts the mounting position of the superimposor in a second direction orthogonal to the optical axis and the first direction.

18. The projection-type display apparatus of claim 17, wherein the adjustment mechanism comprises:

a base adjustment plate;

a first adjustment plate slidably movable in the first direction relative to the base adjustment plate; and

a second adjustment plate slidably movable in the second direction relative to the first adjustment plate.

19. The projection-type display apparatus of claim 18, wherein the adjustment mechanism comprises a first slip prevention mechanism that prevents the first adjustment plate from slipping in the second direction and a second slip prevention mechanism that prevents the second adjustment plate from slipping in the first direction.